



PP18. APPLICATION OF POLYPRENOLS *PAULOWNIA TOMENTOSA* IN THE CULTIVATION OF WINTER WHEAT IN KASHKADARYA REGION

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Recently, growth regulators of natural origin have been used in fields with winter wheat crops. As scientific research and practice prove, these preparations help crops to better absorb micro and macro elements, solar energy, and water in various environmental conditions. Especially winter wheat during its life cycle, plants are affected by many stress factors, such as drought resistance, water deficiency, and salt stress.

Our research aims to study the effect of the *Paulownia tomentosa* plant extract on the biometric and quality indicators of winter wheat to improve cultivation technology. The object of research is the polyphenol of the extract of the plant *P. tomentosa* and the stimulant Uchkun - stimulating the synthesis of auxins. Crops were processed at the time of the exit phase into the tube. The subject of research was the most common winter wheat variety Grom and the local winter wheat variety Bunyodkor. As a result of the studies, it was found that the polyphenol of *P. tomentosa* and stimulant Uchkun, under conditions of drought resistance during the growing season in the Kashkadarya region, contributed to an increase in the content of chlorophylls, the amount of green mass, the coagulation temperature of water-soluble proteins in the leaves of winter wheat.

In the experimental variant with the use of polyphenol, the value of the sum of chlorophylls in the leaves increased by 5.6% compared to the control variant and amounted to about 56.2%. The use of the Uchkun stimulant in the winter wheat crops of the Bunyodkor variety responded with an increase to the control within 14.0%, and the value of this indicator was 58.5%. The temperature of coagulation of water-soluble proteins in the leaves of winter wheat Grom and Bunyodkor variety ranged from 58°C to 59°C during the phases of budding and heading.